# CITY OF COPPELL

**DALLAS / DENTON COUNTY, TEXAS** 



## STANDARD CONSTRUCTION DETAILS

REVISED SEPTEMBER 17, 2020 CITY OF COPPELL ORDINANCE # 2006-1129

#### GENERAL NOTES

- 1. THESE STANDARD CONSTRUCTION DETAIL DRAWINGS ARE BASED ON THE STANDARD DRAWINGS PUBLISHED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (NCTCOG) IN 1996. IN ADDITION TO NUMEROUS LOCAL EXCEPTIONS, MANY DETAILS IN THIS SET ARE UNIQUE TO THE CITY OF COPPELL. THESE STANDARD CONSTRUCTION DETAIL DRAWINGS SUPERSEDE ALL OTHER VERSIONS OF NCTCOG AND CITY OF COPPELL STANDARD CONSTRUCTION DETAILS. THE CITY OF COPPELL RESERVES THE RIGHT TO UPDATE, MODIFY OR SUPERSEDE THESE STANDARD CONSTRUCTION DETAIL DRAWINGS WITHOUT NOTICE. THE CITY OF COPPELL RESERVES THE RIGHT TO REQUIRE METHODS AND MATERIALS CONTRADICTORY TO THOSE SHOWN IN THESE DETAILS ON A CASE BY CASE BASIS.
- 2. THE CITY OF COPPELL HAS ADOPTED THE "Standard Specifications for Public Works Construction", 4TH EDITION, AS ITS BASIC CONSTRUCTION SPECIFICATIONS. THIS DOCUMENT IS AVAILABLE FOR PURCHASE FROM THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (NCTCOG), 616 SIX FLAGS DR., SUITE 200, P.O. BOX 5888, ARLINGTON TEXAS 76005-5888, PH. 817/640-3300, nctcog.org. THE CITY OF COPPELL RESERVES THE RIGHT TO MAKE LOCAL EXCEPTIONS TO ANY STANDARD SPECIFICATION.
- 3. WHERE THE STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS DO NOT ADDRESS A SPECIFIC ITEM ADEQUATELY, REFER TO THE APPROPRIATE STANDARDS PUBLISHED BY THE TEXAS DEPARTMENT OF TRANSPORTATION (TxDOT), THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (T.M.U.T.C.D.), TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (T.C.E.Q.), TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM (T.P.D.E.S.) GENERAL PERMIT, AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (A.A.S.H.T.O.), ASTM International AND THE ENVIRONMENTAL PROTECTION AGENCY (E.P.A).
- 4. LOCAL, STATE AND FEDERAL ORDINANCES WHICH REGULATE DEVELOPMENT IN THE CITY OF COPPELL ARE:
  - a. CITY OF COPPELL SUBDIVISION ORDINANCE.
  - b. CITY OF COPPELL FLOODPLAIN ORDINANCE.
  - c. CITY OF COPPELL IMPACT FEE ORDINANCE.
  - d. CITY OF COPPELL EROSION CONTROL ORDINANCE.
  - e. CITY OF COPPELL ZONING ORDINANCE.
  - f. CITY OF COPPELL RIGHT-OF-WAY MANAGEMENT ORDINANCE.
  - g. CITY OF COPPELL TREE ORDINANCE
  - h. CITY OF COPPELL NOISE ORDINANCE
  - CITY OF COPPELL CITY-WIDE STORM WATER MANAGEMENT STUDY
  - j. TEXAS ACCESSIBILITY STANDARDS (T.A.S.)
  - k. AMERICANS WITH DISABILITIES ACT (A.D.A.)
- ⚠ I. TxDot PED 18 PEDESTRIAN FACILITIES CURB RAMPS



## **TABLE OF CONTENTS**

Division 1000	EROSION & SEDIMENT CONTROL	Division 2000 PAVEMENT SYSTE	MS Cor	ntinued
1010 1020 1030	STRAW BALE DIKE SILT FENCE INTERCEPTOR SWALE	2090 NOT USED 2100 NOT USED 2110 HOT MIX ASPHALTIC CONCRETE PAVEMENT	2195 2200	PAVEMENT SYSTEMS GENERAL NOTES SUBDRAINS Devemont Subgrade
1040 1050	DIVERSION DIKE TRIANGULAR SEDIMENT FILTER DIKE	<u>Two-Lane Undivided Thoroughfare</u> 2120 CONCRETE CURB AND GUTTER	2210	Pavement Subgrade ALLEY GEOMETRICS Type "A" and Type "B"
1060 1070 1080	ROCK BERM STABILIZED CONSTRUCTION ENTRANCE SANDBAG BERM	I <u>ntegral and Separate</u> 2130 MEDIAN ISLAND PAVEMENT <u>Left Turn Lane with Sloped Nose</u>	2220 2230	ALLEY GEOMETRICS  Type "C" and Type "D"  ALLEY GEOMETRICS
1090 1100 1110	STONE OUTLET SEDIMENT TRAP SEDIMENT BASIN PIPE SLOPE DRAIN	2140 MEDIAN ISLAND PAVEMENT <u>Median Island with Sloped Nose</u> 2150-1 DRIVEWAY APPROACH	2240	<u>Type "E" and Type "F"</u> ALLEY GEOMETRICS
1120 1130	INLET PROTECTION <u>Grate Inlet Filter Barrier</u> INLET PROTECTION	<u>Type "A"</u> 2150-2 DRIVEWAY APPROACH <u>Type "A"</u>	2250	Type "G" and Type "H" ALLEY GEOMETRICS Type "J" ALLEY INTERSECTION
1135	<u>Block and Gravel</u> INLET PROTECTION <u>Wattle Filter</u>	2155-1 DRIVEWAY APPROACH  Type "B"  2155-2 DRIVEWAY APPROACH	2260	<u>Proposed to Existing</u> GUARD RAIL AND BARRICADING NOTE
1140 1150	NLET PROTECTION <u>Wire Mesh and Gravel</u> INLET PROTECTION	<u>Type "B"</u> 2160–1 ALLEY APPROACH	2280 2290	TRAFFIC CONTROL NOTE FIRE LANE AND PARKING LOT Reinforced Concrete
1160	Excavated Impoundment EROSION CONTROL MATTING	Radius Return Type 2160—2 ALLEY APPROACH Radius Return Type	2300 2310	FIRE LANE AND PARKING LOT <u>Hot Mix Asphaltic Concrete</u> FIRE LANE AND PARKING LOT
Division 2000	PAVEMENT SYSTEMS	2165-1 ALLEY APPROACH REPLACEMENT <u>Flared Type</u> 2165-2 ALLEY APPROACH REPLACEMENT	2320	<u>Type "A" and Type "B" Turnaround</u> FIRE LANE AND PARKING LOT Fire Lane Marking
2010 2020	REINFORCED CONCRETE PAVEMENT Six-Lane Divided Thoroughfare REINFORCED CONCRETE PAVEMENT	Flared Type 2170 REINFORCED CONCRETE SIDEWALK  Joints and Spacing	2330 ∧ 2335	POURED CONCRETE BASE  Bollard and Direct Bury Pole  POURED CONCRETE BASE
2025	Four-Lane Divided Thoroughfare REINFORCED CONCRETE PAVEMENT Dedicated Left Turn Lane	2180 REINFORCED CONCRETE RETAINING WALL  Integral with Sidewalk  2185 ACCESSIBLE ROUTES, RAMPS AND CROSSWALKS NO	— 2340	Square and Round Sign Post TRAFFIC SIGNALS Collector Streets and Thoroughfares
2030 2035	REINFORCED CONCRETE PAVEMENT  2- & 4-Lane Undivided Thoroughfare  REINFORCED CONCRETE PAVEMENT	2190 COMMERCIAL DRIVEWAY DECORATIVE PAVING Stamped Concrete	2350	PAVEMENT SYSTEMS TESTING REQUIREMENTS



<u>Alleys</u>

<u>Pavement Joints</u>

Street Headers

NOT USED

2040

2050

2060

2070

2080

<u>28' B-B Residential Street</u> REINFORCED CONCRETE PAVEMENT

REINFORCED CONCRETE PAVEMENT

REINFORCED CONCRETE PAVEMENT

REINFORCED CONCRETE PAVEMENT

<u>Transverse Joint Spacing</u>

## **TABLE OF CONTENTS**

### **Division 3000 GENERAL UNDERGROUND CONDUIT**

3010	EMBEDMENT
	<u>Class "A" and "A—1"</u>
3020	EMBEDMENT
	<u>Storm Drain</u>
3030	EMBEDMENT
	<u>Water Main</u>
3040	NOT USED
3050	EMBEDMENT
	<u>Sanitary Sewer</u>
3060	EMBEDMENT
	<u>Class "G" and "G—1"</u>
3070	PAVEMENT CUTS
	Removal and Replacement
3080	NOT USED
3090	ENCASEMENT
	Roadway Crossing Bore
3095	GENERAL UNDERGROUND CONDUIT
	Irrigation Sleeving and Electrical Conduit
3100	GENERAL UNDERGROUND CONDUIT
	<u>General Notes and Testing</u>

## **Division 4000 WATER DISTRIBUTION**

4010-1	HORIZONTAL THRUST BLOCK
4010-2	At Pipe Bend HORIZONTAL THRUST BLOCK
4020	At Pipe Bend HORIZONTAL THRUST BLOCK
, 525	At Tees and Plugs
4030	VERTICAL THRUST BLOCK At Pipe Bend
4040	THRUST BLOCK
4050	General Notes GATE VALVE 16" AND SMALLER
4060	Installation NOT USED
	VAULT CONSTRUCTION
4070-2	Vertical Gate Valve Larger than 16" VAULT CONSTRUCTION
1070 2	Vertical Gate Valve Larger than 16"
4080	NOT USED

### **Division 4000 WATER DISTRIBUTION Continued...**

4090	AIR RELEASE VALVE
4100-1	Type 1 AIR RELEASE VALVE
4100-2	Type 2 AIR RELEASE VALVE Details
4110	BLOW-OFF VALVE Type 1
4120	FIRE HYDRANT Installation
4130	WATER SERVICE INSTALLATION 3/4" Meter — Residential Domestic
4135	WATER SERVICE INSTALLATION
4140	3/4" Meter — Irrigation or Commercial Domestic WATER SERVICE INSTALLATION
4145	1" Meter — Residential Domestic WATER SERVICE INSTALLATION
4150	1" Meter — Irrigation or Commercial Domestic WATER SERVICE INSTALLATION
4155	1-1/2" or 2" Meter - Domestic WATER SERVICE INSTALLATION
4160	1-1/2" or 2" Meter - Irrigation DETECTOR CHECK VALVE INSTALLATION
4162	3" to 6" Service  DOMESTIC AND IRRIGATION SERVICE INSTALLATION
4165	3" to 6" Service DETECTOR CHECK VALVE INSTALLATION
4170	8" to 12" Service FIRE DEPARTMENT CONNECTION (F.D.C.)
4175	Located Outside Paving FIRE DEPARTMENT CONNECTION (F.D.C.)
4180	Located Inside Paving BUILDING FIRE SPRINKLER SYSTEM
4190	Connection to Private Water Main DETECTOR CHECK VAULT
4195	Pre-Cast Construction DETECTOR CHECK VAULT
4200	Cast-In-Place Construction WATER MAIN ADJUSTMENT
4210	at Storm Drain Crossing WATER MAIN ADJUSTMENT
4220	at Sanitary Sewer Crossing VALVE LOCATION AND IDENTIFICATION  Curb Lattering and Color Coding
4225	Curb Lettering and Color Coding WATER VALVE AND WATER LINE ABANDONMENT Inside and Outside of Pavement

WATER DISTRIBUTION Testing Requirements



## **TABLE OF CONTENTS**

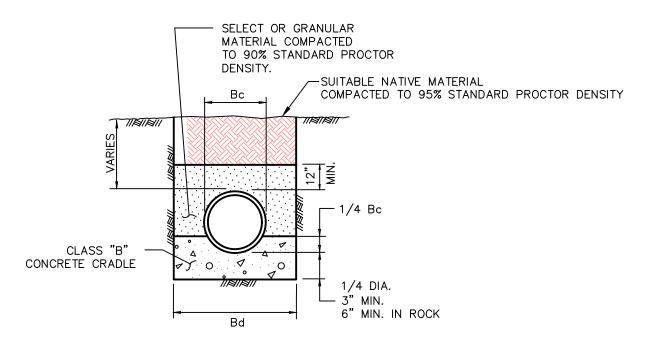
### **Division 5000 SANITARY SEWER**

	5010	SANITARY SEWER
	5020	Main Tie—in at Cleanout or Stubout SANITARY SEWER
	5070	Manhole: Pre-Cast
	5030	SANITARY SEWER  Manhole: Cast-in-Place
	5040	NOT USED
	5050	SANITARY SEWER
	5060	Manhole: Pressure Type SANITARY SEWER
	5070	Manhole: Vented Type
	3070	SANITARY SEWER  Manhole: Outside Drop Connection
	5080	SANITARY SEWER
		Manhole: Inside Drop Connection
	5090	SANITARY SEWER
	5100	Manhole: Line Intersection SANITARY SEWER
	3100	Manhole: False Bottom
	5105	SANITARY SEWER
		Wastewater Access Device (W.A.D.)
	5110	SANITARY SEWER
î	5115	<u>6" Commercial Cleanout</u> SANITARY SEWER
		6" Commercial Inline Cleanout
	5120	SANITARY SEWER
	5130	Standard Service Connection SANITARY SEWER
	3130	Deep Service Connection
	5140	SANITARY SEWER
		<u>Lateral Replacement Prior to Paving</u>
	5150	SANITARY SEWER
	5160	Manhole Abandonment In and Out of Paving SANITARY SEWER
	0.00	Aerial Crossing
	5170	MANHOLE AND CLEANOUT LOCATION AND IDENTIFICATION
	5180	Curb Lettering and Color Coding SANITARY SEWER
	3100	General Notes and Testing
		<u></u>

### **Division 6000 STORM DRAIN**

6010	- · · · · · · · · · · · · · · · · · · ·
6020-	Manhole 4', 5', or 6' Square  I STORM DRAIN
6020-2	<u>Curb Inlet: 5', 10', 15' or 20' Opening</u> 2 STORM DRAIN
6020-3	Curb Inlet: 5', 10', 15' or 20' Opening 3 STORM DRAIN
6020-	Curb Inlet: Rebar, Manhole Frame and Cover 4 STORM DRAIN Curb Inlet: Bill of Bainforeing Stock
6020-	Curb Inlet: Bill of Reinforcing Steel 5 STORM DRAIN Curb Inlet: Summary of Quantities
6030-	Curb Inlet: Summary of Quantities  STORM DRAIN
6030-2	Recessed Curb Inlet: 5', 10', 15' or 20' 2 STORM DRAIN
6030-3	Recessed Curb Inlet: 5', 10', 15' or 20' 3 STORM DRAIN
6030-	Recessed Curb Inlet: Throat and Manhole Cover 4 STORM DRAIN
6040	- · - · · · · · - · · · · · ·
6050 6060	
6070	Full Channel Lining STORM DRAIN
6080	Vertical Headwall STORM DRAIN
6085	Sloping Headwall STORM DRAIN  Diag Caller and Field Connection
6090	Pipe Collar and Field Connection STORM DRAIN General Notes and Testing





CLASS "A"

CLASS "B" CONCRETE CRADLE N.T.S. PLAIN CONC. LF 2.8 REINF. CONC. LF 3.4 P=0.4%

#### NOTES:

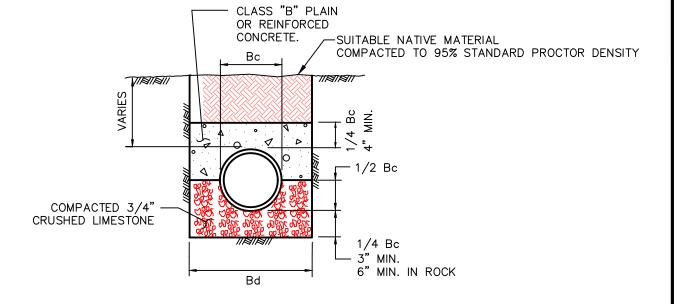
- LF. = LOAD FACTOR TO BE USED TO DETERMINE 3 EDGE BEARING BASED ON TYPE OF EMBEDMENT.
- 2. FREE-FALL OF CONCRETE NOT TO EXCEED 5 FT.
- 3. P = Rho FOR STEEL %
- 4. Bc = OUTSIDE DIAMETER OF PIPE
- 5. Bd = TRENCH WIDTH
- 6. GREEN TRACER TAPE SHALL BE PLACED OVER ALL SANITARY SEWER MAINS.
- 7. BLUE TRACER WIRE, AWG #12, SHALL BE PLACED OVER ALL WATER MAINS AND ROUTED THROUGH VALVE STACKS.
- 8. CLASS "A" AND "A-1" EMBEDMENT MAY BE USED WHEN APPROVED BY THE CITY ENGINEER FOR EMBEDMENT OF A WATER OR SANITARY SEWER PIPE WHICH PASSES BENEATH A STORM DRAIN PIPE.

#### North Central Texas Council of Government



NOTE: STANDARDS ARE ADOPTED FROM THE NCTCOG STANDARD DRAWINGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

	1.0.0		
NO.	LOCAL EXCEPTION	BY	DATE



CLASS "A-1"

CLASS "B" CONCRETE CAP PLAIN CONC. LF 2.8 REINF. CONC. LF 3.4 P=0.4% REINF. CONC. LF 4.8 P=1.0% N.T.S.

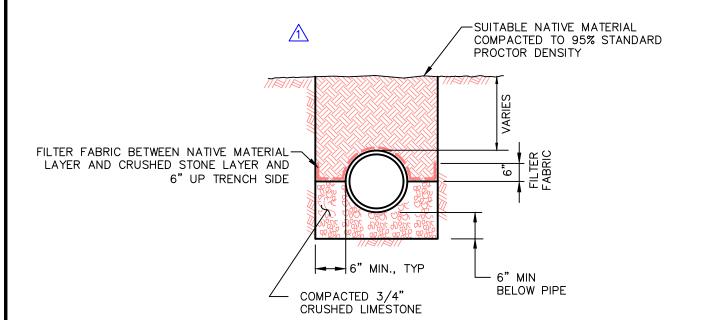
STANDARD CONSTRUCTION DETAILS

EMBEDMENT

CLASS "A" AND "A-1"

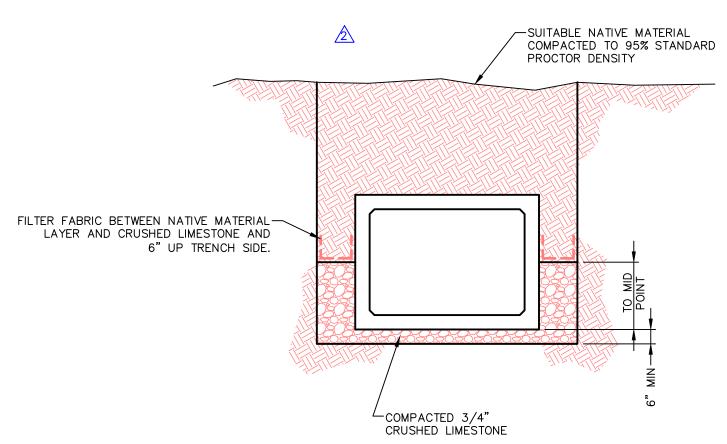
CITY OF COPPELL DALLAS COUNTY, TEXAS

STD. SPEC.
REFERENCE
504, 702.
STANDARD DETAIL
3010



STORM DRAIN EMBEDMENT, RCP

N.T.S.



STORM DRAIN EMBEDMENT, RCBC

N.T.S.

#### North Central Texas Council of Government



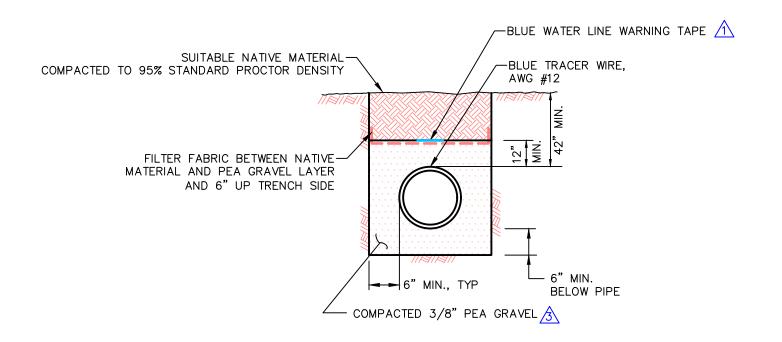
NOTE: STANDARDS ARE ADOPTED FROM THE NCTCOG STANDARD DRAWINGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

<u> </u>	REMOVED SELECT FILL LAYER OVER RCBC	CMSB	MAR. '20
$\triangle$	REMOVED SAND LAYER OVER RCP	CMSB	MAR. '20
NO.	LOCAL EXCEPTION	BY	DATE



STANDARD CONSTRUCTION DETAILS
EMBEDMENT
STORM DRAIN
CITY OF COPPELL DALLAS COUNTY, TEXAS

STD. SPEC. REFERENCE 508. STANDARD DETAIL 3020



## WATER MAIN EMBEDMENT

(UNLESS MODIFIED BY APPROVED CONSTRUCTION PLANS) N.T.S.

#### NOTES:

- 1. BLUE TRACER WIRE, AWG #12, SHALL BE PLACED OVER ALL WATER MAINS AND ROUTED THROUGH VALVE STACKS.
- 2. BLUE WATER LINE WARNING TAPE SHALL BE PLACED 12" ABOVE ALL WATER MAINS.
  - 3. WATER LINE MINIMUM COVER IS 42" TO TOP OF PIPE.
- 4. ALL UTILITY CROSSINGS SHALL MEET TCEQ REQUIREMENTS.

#### North Central Texas Council of Governments



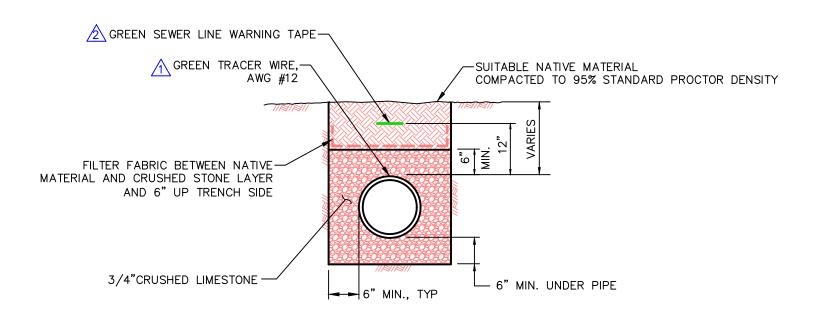
NOTE: STANDARDS ARE ADOPTED FROM THE NCTCOG STANDARD DRAWINGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

<u>3</u>	CHANGED EMBEDMENT MATERIAL FROM SAND TO 3/8" PEA GRAVEL	CMSB	MAR. '20
<u> 2</u>	ADDED NOTE 4	CMSB	MAR. '20
$\triangle$	ADDED WARNING TAPE	CMSB	MAR. '20
NO.	LOCAL EXCEPTION	BY	DATE



STANDARD CONSTRUCTION DETAILS
EMBEDMENT
WATER MAIN
CITY OF CODDELL DALLAS COLINTY TEYAS

STD. SPEC. REFERENCE 504., 506. STANDARD DETAIL 3030



## SANITARY SEWER LINE EMBEDMENT

(UNLESS MODIFIED BY APPROVED CONSTRUCTION PLANS) N.T.S.

#### NOTE:

1. GREEN TRACER WIRE, AWG #12, SHALL BE PLACED OVER ALL SANITARY SEWER MAINS.

2. GREEN SEWER LINE WARNING TAPE SHALL BE PLACED 12" ABOVE ALL SANITARY SEWER MAINS.

3. ALL UTILITY CROSSINGS SHALL MEET TCEQ REQUIREMENTS.

#### North Central Texas Council of Government



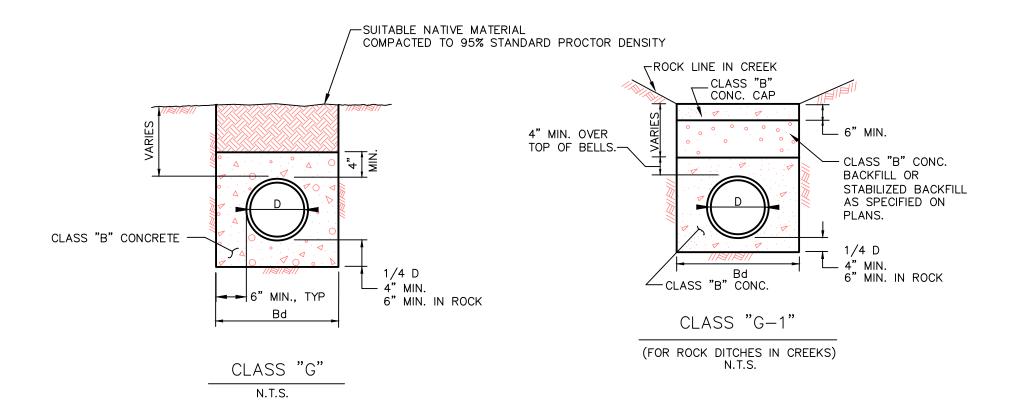
NOTE: STANDARDS ARE ADOPTED FROM THE NCTCOG STANDARD DRAWNGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

<u>3</u>	ADDED NOTE 3	CMSB	MAR. '20
<u> 2</u>	ADDED WARNING TAPE	CMSB	MAR. '20
$\triangle$	CHANGED TRACER TAPE TO TRACER WIRE	CMSB	MAR. '20
NO.	LOCAL EXCEPTION	BY	DATE



STANDARD CONSTRU	CTION DETAILS	
EMBEDM	ENT	
SANITARY SEWER		
CITY OF COPPELL DALLAS	COUNTY, TEXAS	

STD. SPEC. REFERENCE 504., 507. STANDARD DETAIL 3050



#### NOTES:

- 1. D = INSIDE DIAMETER OF PIPE
- 2. Bd = TRENCH WIDTH
- 3. TRACER TAPE SHALL BE PLACED OVER ALL SANITARY SEWER MAINS.
- 4. BLUE TRACER WIRE, AWG #12, SHALL BE PLACED OVER ALL WATER MAINS.

#### North Central Texas Council of Government



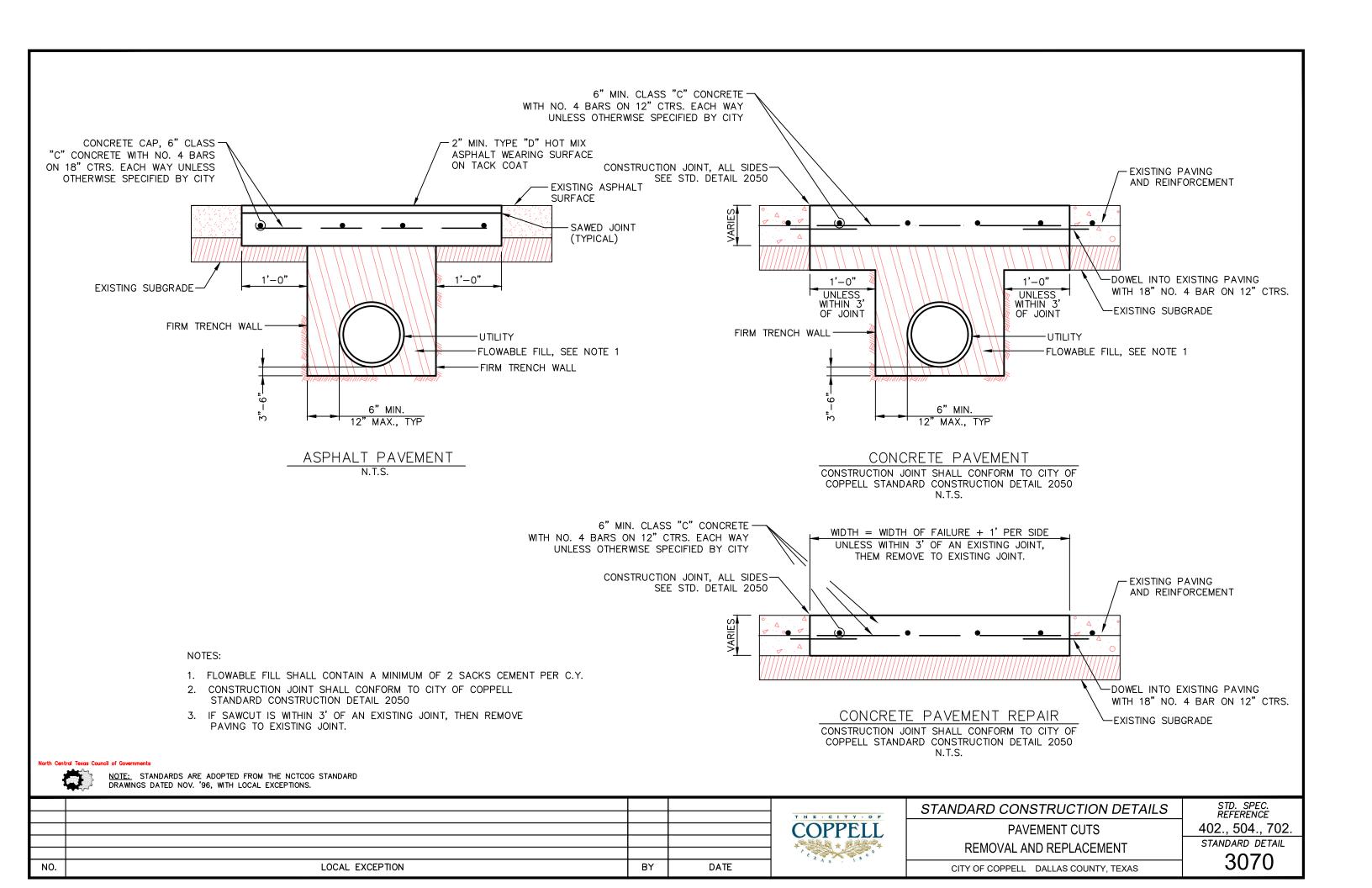
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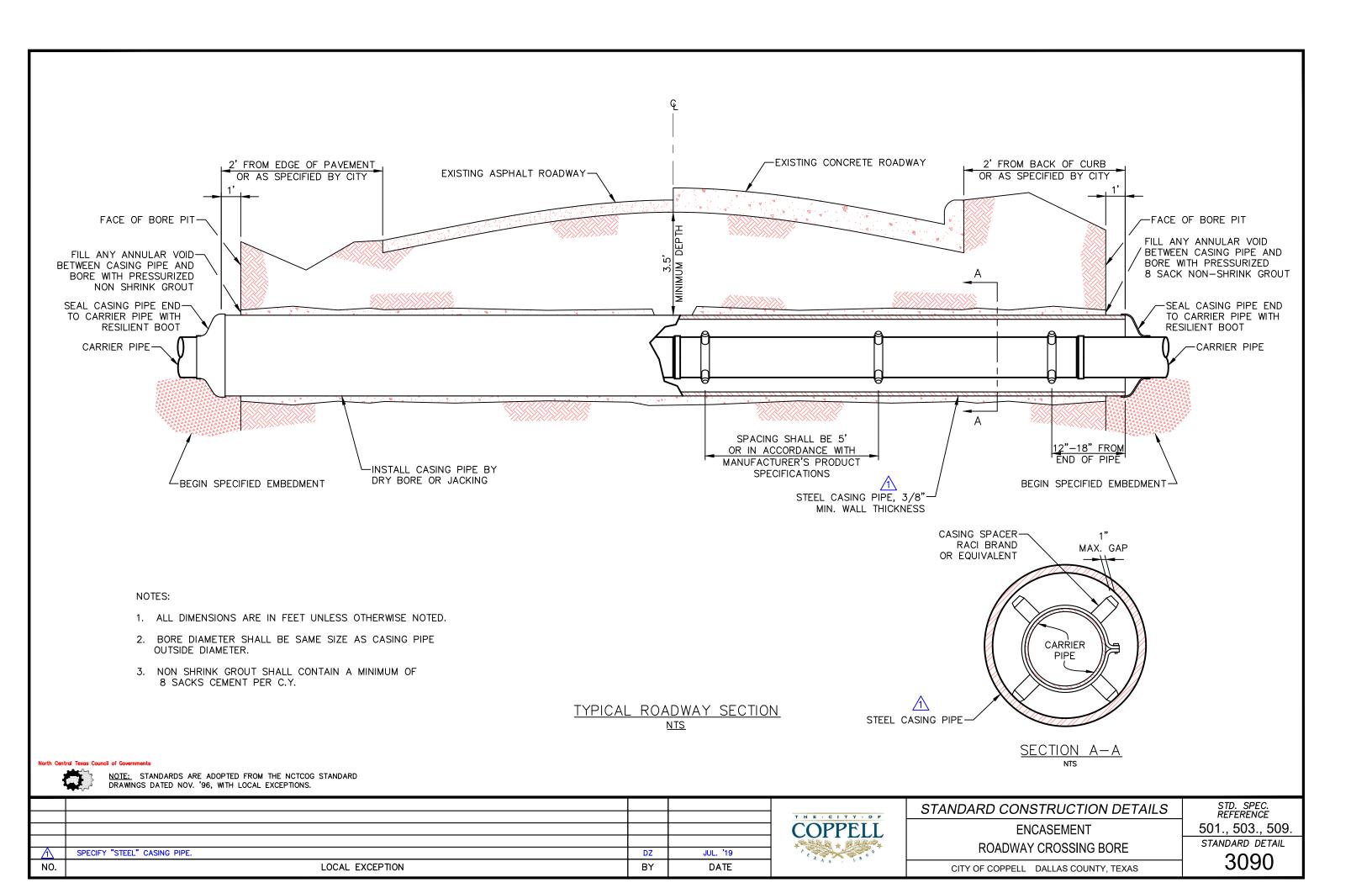
NO.	LOCAL EXCEPTION	BY	DATE

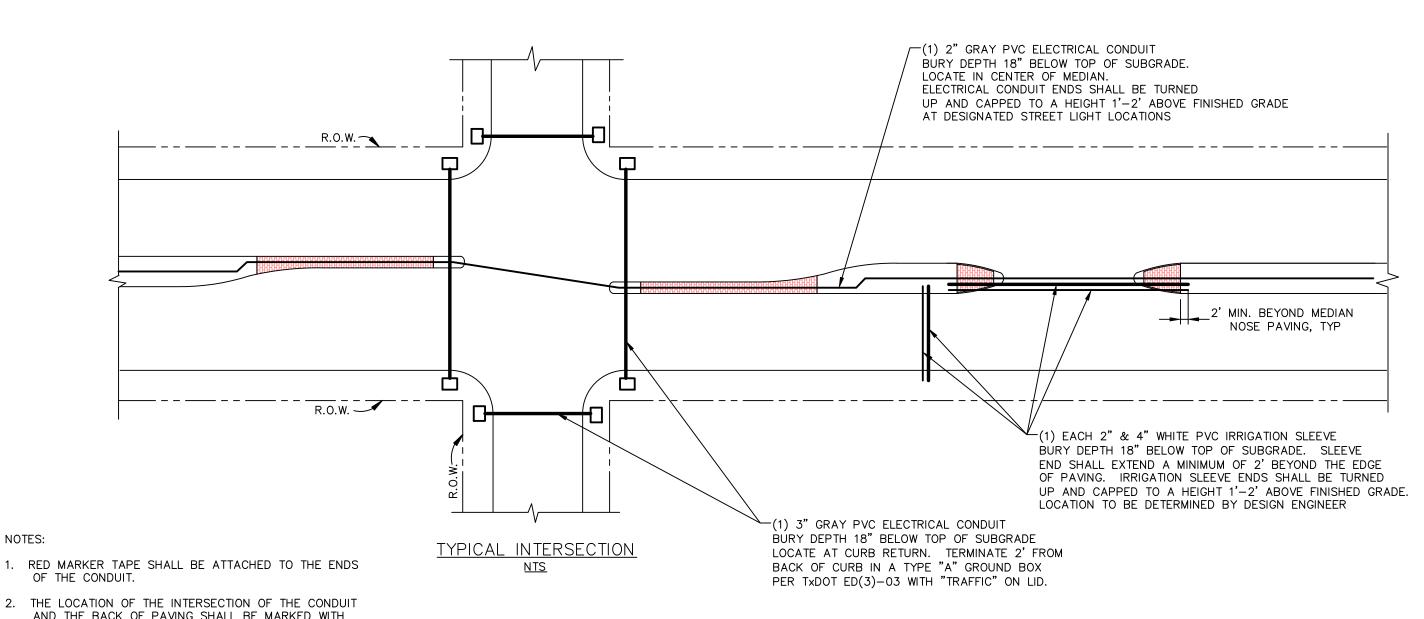


STANDARD CONSTRUCTION DETAILS		
EMBEDMENT		
CLASS "G" AND "G-1"		
CITY OF COPPELL DALLAS COUNTY, TEXAS		

STD. SPEC. REFERENCE 504., 702. STANDARD DETAIL 3060







- AND THE BACK OF PAVING SHALL BE MARKED WITH A CHISELED "X" AND RED PAINT.
- 3. "MULE TAPE" CORD WITH INTEGRAL TRACER WIRE SHALL BE PLACED IN ALL CONDUIT. CORD SHALL EXTEND A MINIMUM OF 1' FROM THE CONDUIT END.
- 4. ALL PIPE JOINTS SHALL BE SOLVENT WELDED.
- 5. ALL CONDUIT/SLEEVING SHALL BE SCHEDULE 80 PVC OR DR 11 HDPE, GRAY IN COLOR.
- 6. ADDITIONAL CONDUIT MAY BE NECESSARY DUE TO SITE CONDITIONS.



NOTE: STANDARDS ARE ADOPTED FROM THE NCTCOG STANDARD DRAWINGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

	1.0		
NO.	LOCAL EXCEPTION	BY	DATE



STANDARD CONSTRUCTION DETAILS
GENERAL UNDERGROUND CONDUIT
RRIGATION SLEEVING AND ELECTRICAL CONDUIT

CITY OF COPPELL DALLAS COUNTY, TEXAS

STD. SPEC. REFERENCE 805. STANDARD DETAIL 3095

## GENERAL UNDERGROUND CONDUIT GENERAL NOTES AND TESTING

- 1. CONDUIT SHALL NOT BE PLACED WHERE IT IS LIKELY TO BE DAMAGED.
- 2. MECHANICAL COMPACTION IS REQUIRED IN TRENCH BACKFILL. COMPACTION WITH EXCAVATOR BUCKET IS NOT PERMITTED.



NOTE: STANDARDS ARE ADOPTED FROM THE NCTCOG STANDARD DRAWINGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

NO.	LOCAL EXCEPTION	BY	DATE



## STANDARD CONSTRUCTION DETAILS GENERAL UNDERGROUND CONDUIT

CITY OF COPPELL DALLAS COUNTY, TEXAS

GENERAL NOTES AND TESTING

STD. SPEC. REFERENCE

STANDARD DETAIL 3100